



DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 224

[Docket No. 220722-0162]

RIN 0648-BI88

Amendments to the North Atlantic Right Whale Vessel Strike Reduction Rule

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule.

SUMMARY: NMFS is proposing changes to the North Atlantic right whale (*Eubalaena glacialis*) vessel speed regulations to further reduce the likelihood of mortalities and serious injuries to endangered right whales from vessel collisions, which are a leading cause of the species' decline and a primary factor in an ongoing Unusual Mortality Event. The proposed rule would: 1) modify the spatial and temporal boundaries of current speed restriction areas referred to as Seasonal Management Areas (SMAs), 2) include most vessels greater than or equal to 35 ft (10.7 m) and less than 65 ft (19.8 m) in length in the size class subject to speed restriction, 3) create a Dynamic Speed Zone framework to implement mandatory speed restrictions when whales are known to be present outside active SMAs, and 4) update the speed rule's safety deviation provision. Changes to the speed regulations are proposed to reduce vessel strike risk based on a coast-wide collision mortality risk assessment and updated information on right whale distribution, vessel traffic patterns, and vessel strike mortality and serious injury events. Changes to the existing vessel speed regulation are essential to stabilize the ongoing right whale population decline and prevent the species' extinction.

DATES: Submit comments on or before [INSERT DATE 60 DAYS FROM DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

ADDRESSES: You may submit comments on this document, identified by NOAA-NMFS-2022-0022, by electronic submission. Submit all electronic public comments via the Federal eRulemaking Portal. Go to <https://www.regulations.gov> and enter NOAA-NMFS-2022-0022 in the Search box. Click the “Comment” icon, complete the required fields and enter or attach your comments. You may submit comments on supporting materials via the same electronic submission process, identified by NOAA-NMFS-2022-0022.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on <https://www.regulations.gov> without change. All personal identifying information (*e.g.*, name, address, *etc.*), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter “N/A” in the required fields if you wish to remain anonymous). The Draft Environmental Assessment, and the Draft Regulatory Impact Review/Initial Regulatory Flexibility Analysis prepared in support of this proposed rule, are available via the internet at <https://www.regulations.gov/> or obtained via email from the persons listed below.

FOR FURTHER INFORMATION CONTACT: Caroline Good,
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SUPPLEMENTARY INFORMATION:

Background

The North Atlantic right whale (*Eubalaena glacialis*) was severely depleted by commercial whaling and, despite protection from commercial harvest since 1935, has not

recovered. Following two decades of growth between 1990 and 2010, the species has been in decline over the past decade (Pace *et al.* 2017; Pace 2021), with a recent preliminary population estimate of fewer than 350 individuals remaining. North Atlantic right whale abundance began to decline in 2010 due to a combination of increased human-caused mortality and decreased reproductive output (Pace *et al.* 2017). The decline coincided with changes in whale habitat use patterns, characterized by the whales' increasing use of areas with few protections from anthropogenic harm (Davis *et al.* 2017; Meyer-Gutbrod and Greene 2018; Record *et al.* 2019). The species' decline has been exacerbated by an ongoing Unusual Mortality Event (UME) that NMFS declared in 2017, pursuant to section 404 of the Marine Mammal Protection Act (MMPA), and includes an unprecedented 51 known mortalities and serious injuries to date, impeding the species' recovery. NMFS interprets the regulatory definition of serious injury as any injury that is "more likely than not" to result in mortality, or any injury that presents a greater than 50 percent chance of death to a marine mammal (NMFS 2014). Thus, lethal strike events are those that have or are likely to result in a mortality.

Entanglement in fishing gear and vessel strikes are the two primary causes of right whale mortality and serious injury. Human-caused mortality to adult females, in particular, is limiting recovery of the species (Moore *et al.* 2005, 2021; Corkeron *et al.* 2018; Hayes *et al.* 2019; Sharp *et al.* 2019). Anthropogenic trauma was the sole source of mortality for right whale adults and juveniles for which a cause of death could be determined between 2003 and 2018 (Sharp *et al.* 2019). North Atlantic right whale calving rates dropped from 2017 to 2020, with zero births recorded during the 2017-2018 season. The 2020-2021 calving season had the first substantial calving increase in five years, with 20 calves born, followed by 15 calves during the 2021-2022 calving season. However, mortalities continue to outpace births, and best estimates indicate fewer than 100 reproductively active females remain in the population.

NMFS has determined that the Potential Biological Removal (PBR) for the species— defined by the MMPA as “the maximum number of individuals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population”— is 0.7 whales (NMFS 2021). This means that for the species to recover, the population cannot sustain, on average over the course of a year, the death or serious injury of a single individual due to human causes. Observed human caused mortality far exceeds this level and a recent assessment of total right whale mortality estimates range-wide indicates that observed deaths likely captured only about 36 percent of the actual total deaths between 1990 and 2017 (Pace *et al.* 2021). Right whale abundance will continue to decline, imperiling species recovery, unless human caused mortality is substantially reduced in the near term.

North Atlantic right whales inhabit U.S. waters year-round but predominate during late fall through early summer. Within U.S. waters, the whales primarily forage in the greater Gulf of Maine region (Pershing *et al.* 2009; Davies *et al.* 2014). The species’ only known winter calving area lies within the South Atlantic Bight between northern Florida and North Carolina (Keller *et al.* 2012; Gowan and Ortega-Ortiz 2014). The Mid-Atlantic region serves both as a migratory habitat for whales moving between calving areas and northern foraging grounds, as well as a foraging habitat. Right whales can be highly mobile, traveling upwards of 40 nautical miles per day, or, when engaged in certain behaviors (*e.g.*, foraging), relatively stationary, remaining within several miles for days (Baumgartner and Mate 2005; Crowe *et al.* 2021). The whales’ primary distribution includes seasonal coastal habitats characterized by extensive commercial and recreational vessel traffic.

North Atlantic right whales are vulnerable to vessel strike due to their coastal distribution and frequent occurrence at near-surface depths, and this is particularly true for females with calves. The proportion of known vessel strike events involving females,

calves, and juveniles is higher than their representation in the population (NMFS 2020). Mother/calf pairs are at high risk of vessel strike because they frequently rest and nurse in nearshore habitats at or near the water surface, particularly in the Southeast calving area (Cusano *et al.* 2018; Dombroski *et al.* 2021). Calving females have the longest residence time of any demographic group on the Southeast calving ground, staying on average about three months in the region before traveling with their nursing calves to northern foraging areas (Krzystan *et al.* 2018). Right whales nurse their calves for up to a year. This promotes rapid calf growth (Fortune *et al.* 2012) but also places mother/calf pairs at increased risk of vessel interactions, not only within the Southeast calving ground but also along the Mid-Atlantic and New England coasts, which are important migratory and foraging areas for right whales.

Numerous studies have indicated that slowing the speed of vessels reduces the risk of lethal vessel collisions, particularly in areas where right whales are abundant and vessel traffic is common and otherwise traveling at high speeds (Vanderlaan and Taggart 2007; Conn and Silber 2013; Van der Hoop *et al.* 2014; Martin *et al.* 2015; Crum *et al.* 2019). In 2008, NMFS implemented 10-knot (5.1 meters/second (m/s)) vessel speed restrictions for a five-year period for most vessels greater than or equal to 65 ft (19.8 m) in overall length within designated areas commonly referred to as Seasonal Management Areas (SMAs) along the U.S. East Coast to reduce the risk of mortality and serious injury from vessel strike (73 FR 60173, October 10, 2008 (50 CFR 224.105)). NMFS later removed the five-year “sunset” provision from the speed rule (78 FR 73726, December 9, 2013; 79 FR 34245, June 16, 2014), and the rule continues in effect today.

Reducing vessel speed is one of the most effective, feasible options available to reduce the likelihood of lethal outcomes from vessel collisions with right whales. Previous investigations indicate that NMFS’ speed regulations at 50 CFR 224.105 for most vessels greater than or equal to 65 ft (19.8 m) in length reduced the risk of lethal

vessel strikes to right whales (Conn and Silber 2013; Laist *et al.* 2014). In 2021, NMFS released the North Atlantic Right Whale Vessel Speed Rule Assessment (hereafter “speed rule assessment”) documenting a reduction in observed right whale serious injuries and mortalities resulting from vessel strikes since implementation of the speed rule in 2008 (50 CFR 224.105), but highlighting the need for additional action to more effectively address the risk of vessel strikes to right whales (NMFS 2020).

NMFS is addressing risk from fishing gear entanglement through separate regulatory actions from this proposed rule as informed by the Atlantic Large Whale Take Reduction Team (ALWTRT) and continues to work on additional measures to further reduce lethal entanglements. The MMPA directs NMFS to reduce incidental entanglements in commercial fisheries that cause mortalities and serious injuries of marine mammal stocks above a biological reference point (*i.e.* PBR) through a consensus-based Take Reduction Process. The ALWTRT is a large stakeholder group NMFS has convened numerous times since 1996 to develop recommendations to reduce mortality and serious injury of right whales and other large whales covered under the Atlantic Large Whale Take Reduction Plan. The ALWTRT continues to meet regularly to develop recommendations to further modify the Plan and reduce right whale entanglements in commercial fisheries.

Summary of Current North Atlantic Right Whale Vessel Strike Reduction Measures

NMFS has implemented a combination of regulatory requirements and voluntary programs aimed at modifying mariner behavior and/or increasing mariner awareness of right whale presence to reduce vessel collision risk. Together, these efforts address two aspects of reducing strike risk: 1) reducing the spatial overlap of right whales and vessels, and 2) reducing the speed of vessels in areas and at times when right whales are likely to be present. Below is a summary of vessel strike reduction actions implemented by NMFS and other Federal partners to date.

Statutory Protections

- (1) “Take” Prohibitions. Both the Endangered Species Act (ESA) and the MMPA generally prohibit the unauthorized “take” of North Atlantic right whales. Under the ESA, “take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” (16 USC 1532(19)). Under the MMPA, “take means to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill.” (16 USC 1362(13)).
- (2) ESA Section 7 Consultations. As required by Section 7(a)(2) of the ESA, as amended (ESA; 16 USC 1531 *et seq.*), all U.S. Federal agencies must consult with NMFS to ensure that any actions they authorize, fund, or carry out that may affect ESA-listed species under NMFS jurisdiction are not likely to jeopardize the continued existence of those species or adversely modify or destroy their designated critical habitat. When Federal agencies authorize vessel activities potentially co-occurring with right whales and engage in consultations with NMFS, they often implement measures governing vessel speed designed to reduce the risk of right whale interactions.

Regulatory Measures

- (1) North Atlantic Right Whale Vessel Speed Rule. In 2008, NMFS implemented a rule requiring most vessels equal to or greater than 65 ft (19.8 m) in length to transit at speeds of 10 knots (5.1 m/s) or less in designated SMAs (73 FR 60173, October 10, 2008) pursuant to its authority under the MMPA and ESA. Some vessels are exempt from this requirement including military vessels, vessels owned, operated or contracted by the Federal government, and vessels engaged in enforcement or search and rescue activities (50 CFR 224.105(a)). Although these vessels are exempt from the speed rule, they are not exempt from consultation under section 7 of the ESA. During consultations, mitigation measures, including

reduced speeds, may be recommended or specified to reduce the threat of vessel collisions with right whales. Regulatory requirements, such as those proposed here that contain a maximum vessel speed but no minimum, are separate from any requirements specified as part of ESA section 7 consultations and are not expected to result in the need to reinitiate existing consultations (50 CFR 402.16). In addition, subject to specific requirements, vessels may deviate from the speed restriction (*i.e.*, exceed the speed limit), under limited circumstances, to maintain safe maneuvering speeds (50 CFR 224.105(c)). Vessels employing this safety deviation must make a notation in the vessel logbook detailing the event. Ten SMAs were designated along the U.S. East Coast with seasonally active periods reflective of temporal trends in right whale habitat use. The locations of the SMAs were informed by vessel traffic (*i.e.*, port entrances were assumed high traffic areas relative to other areas) and right whale distribution data at the time the rule was established. NMFS selected the 10-knot (5.1 m/s) speed limit based on analyses of large whale vessel strike events where the vessel speed at the time of impact was known. Researchers found the probability of whale mortality increased substantially with vessel speed, with the greatest increase occurring between speed of 10 to 14 knots (5.1 to 7.2 m/s; Vanderlaan and Taggart 2007). Based on these findings, NMFS determined that the use of speed restrictions was an effective means to reduce the likelihood and severity of vessel collisions.

(2) 500 Yard (457.2 m) Minimum Approach Distance. In 1997, NMFS implemented a minimum approach distance for vessels in the vicinity of North Atlantic right whales in an effort to reduce harassment and risk of injury (62 FR 6729, February 13, 1997). It is illegal for a vessel to approach within 500 yards (457.2 m) of a right whale, and if a vessel finds itself within 500 yards (457.2 m) it “must steer a course away from the right whale and immediately leave the area at a slow safe

speed” (50 CFR 224.103(c)(1-2)). Exceptions are made if “compliance would create an imminent or serious threat to a ... vessel” (50 CFR 224.103(c)(3)).

Non-Regulatory Measures:

- (1) Great South Channel Area To Be Avoided (ATBA). An ATBA is an International Maritime Organization (IMO)-established vessel routing measure within a specified area to avoid navigational hazards or environmentally sensitive areas. In June 2009, an ATBA was established in the Great South Channel to the east of Cape Cod, MA after gaining approval from the IMO. All vessels greater than or equal to 300 gross tons are recommended to avoid this area between April 1 and July 31.
- (2) Recommended Routes. In 2006, a joint U.S. Coast Guard/NOAA effort established recommended routes for vessels transiting across Cape Cod Bay and into/out of ports in Florida and Georgia. The routes are recommended between January and May in Cape Cod Bay and between November and April off Florida and Georgia. Mariners are recommended to follow the routes to minimize their transit distance through important right whale habitat areas.
- (3) Modification to the Boston Traffic Separation Scheme (TSS). In 2007, following a successful application to the IMO led by the Stellwagen Bank National Marine Sanctuary and NMFS, a modified TSS (commonly referred to as a shipping lane) was implemented to the north of Cape Cod, MA for vessel traffic navigating to and from the Port of Boston. The modification narrowed the TSS and shifted its route to the north around Cape Cod to reduce the overlap with large whale foraging grounds.
- (4) Dynamic Management Areas (DMAs) and Right Whale Slow Zones. NMFS implemented a voluntary DMA program concurrently with the mandatory speed rule in 2008. A DMA is triggered when a group of three or more right whales are

sighted in close proximity. Beginning in 2020, the NMFS Greater Atlantic Region modified the DMA program to include acoustically triggered Slow Zones. Once the trigger is met, NMFS establishes a boundary around the whales for 15 days and encourages vessels either to avoid the area or transit through at speeds less than 10 knots (5.1 m/s). DMAs/Slow Zones may be extended if whales remain in the area. The agency alerts mariners to DMA and Slow Zone declarations through website postings, emails to lists of interested parties, U.S. Coast Guard Local Notices to Mariners, and U.S. Coast Guard Broadcast Notices to Mariners.

Need for Additional Action

In January 2021, NMFS released an assessment evaluating the effectiveness of the North Atlantic right whale speed rule and associated voluntary DMA program (NMFS 2020) and invited the public to submit comments. The review found that the speed rule had made progress in reducing vessel strike risk to right whales but that additional action is warranted to further reduce the threat of vessel collisions. While it is not possible to establish a direct causal link between speed reduction efforts and the relative decline in observed right whale mortality and serious injury events following implementation of the speed rule, the preponderance of evidence suggests speed reductions, as implemented, have helped. NMFS' data on documented vessel strike events continues to affirm the role of high vessel speeds (> 10 knots (5.1 m/s)) in lethal collision events and supports existing studies implicating speed as a factor in lethal strikes events. NMFS has documented five right whale vessel strike cases in U.S. waters that resulted in *non-serious* injuries for which vessel speed is known. Only one of the five vessels involved was transiting in excess of 10 knots (5.1 m/s) at the time of the collision. In contrast, of the nine documented lethal right whale vessel collisions in U.S. waters since 1990 for which vessel speed is known, eight involved vessels transiting in excess of 10 knots (5.1 m/s).

Since the speed rule first went into effect, NMFS has documented 12 right whale mortality and serious injury events involving vessel collisions in U.S. waters, along with an additional five mortality and serious injury events involving unknown whale species, possibly right whales. These figures likely underestimate the total number of lethal right whale vessel strikes in U.S. waters. Strikes occurring farther offshore and/or involving large ocean-going vessels are likely underreported in the data because most large ships are not able to detect interactions with large whales, and whales that die well offshore are less likely to be detected overall. Based on estimates of total right whale deaths, documented mortalities from all sources represent approximately one-third of actual annual right whale mortality range-wide (Pace *et al.* 2021). Thus, in addition to the observed events, NMFS recognizes that additional lethal vessel strike events likely went undetected in U.S. waters.

A detailed examination of documented right whale vessel strike events in the U.S. further reveals the following:

- 1) Vessels less than 65 ft (19.8 m) in length accounted for five of the 12 documented lethal strike events in U.S. waters since 2008, demonstrating the significant risk this unregulated vessel size class can present to right whales.
- 2) Vessel strikes continue to occur all along the U.S. coast from the Gulf of Maine to the Florida coast. There is no indication that strike events only occur in “hot spots” or limited spatial/seasonal areas.
- 3) Strikes occur both inside and outside active SMAs, but in many cases, the location of the strike event remains unknown. Four of the five collision events involving vessels less than 65 ft (19.8 m) in length occurred inside active SMAs, although the vessels involved were not subject to mandatory speed restrictions due to their size.

- 4) Of the six lethal vessel strike cases documented in U.S. waters and involving right whales since 1999 where vessel speed is known, only one involved a vessel transiting at under 10 knots (5.1 m/s) (~9 knots (4.6 m/s)), although in most cases, we lack vessel speed data associated with collision events.
- 5) Females, calves, and juveniles are disproportionately represented in the vessel strike data. This is concerning given the paucity of reproductively active females remaining in the population and their critical role in stabilizing the population decline.
- 6) Non-lethal vessel collisions with right whales continue to occur. NMFS' best estimates indicate that vessel strikes (in U.S. waters or first seen in U.S. waters) have resulted in at least 26 non-serious right whale injuries since 2008, although these data do not account for the possibility of blunt force trauma injuries, which are not usually visibly detectable and make accurate assessments of strike injuries challenging.

Despite NMFS' best efforts, the current speed rule and other vessel strike mitigation efforts are insufficient to reduce the level of lethal right whale vessel strikes to sustainable levels in U.S. waters. NMFS has determined that additional action is needed to address gaps in current management programs and better tailor mitigation efforts. In evaluating potential changes to the current speed rule NMFS considered up-to-date strike risk modeling, data on right whale strike events, species distribution, and vessel traffic characteristics in right whale habitat, and the extensive and informative comments received in response to the 2020 speed rule assessment.

Summary of Proposed Changes

NMFS proposes changes to the existing North Atlantic right whale vessel speed regulations. The proposed measures detailed below seek to reduce the risk of mortality and serious injury from vessel strike events in U.S. waters and include the following:

- (1) Changes to the spatial boundaries and timing of mandatory SMAs to better address areas and times where vessel strike risk is high;
- (2) Inclusion of most vessels greater than or equal to 35 ft (10.7 m) and less than 65 ft (19.8 m) in length in the vessel size class subject to the speed restriction;
- (3) Implementation of a Dynamic Speed Zone (DSZ) framework to implement mandatory speed restrictions when whales are known to be present outside active SMAs; and
- (4) Updates to the speed rule's safety deviation provision.

Modification of Seasonal Speed Zones (currently referred to as Seasonal Management Areas)

Since implementation of the speed rule in 2008, the distribution of right whales has shifted, resulting in a misalignment between areas of high vessel strike risk and current SMA spatial and temporal bounds. Improved data on vessel traffic and right whale distribution/habitat use further highlight this discrepancy and the need to adjust SMA boundaries to better address the risk of collisions. For example, after 2010, right whales began to frequent the region south of Martha's Vineyard and Nantucket, MA, and are now regularly observed in large aggregations foraging in the area (Leiter *et al.* 2017). Prior to this period, that region, while part of right whale habitat, was not identified as an important foraging area. In 2021 alone, 67 voluntary DMAs and Slow Zones were declared (28 of which were off Martha's Vineyard and Nantucket), demonstrating the ongoing spatial and temporal mismatch between whale aggregations and vessel strike protections.

The goal for vessel speed regulation remains unchanged—to reduce the likelihood of right whale serious injuries and mortalities from vessel collisions. To maximize the reduction of vessel strike risk, NMFS developed proposed modifications to the SMAs using a coast-wide vessel strike mortality risk model, North Atlantic right whale visual

sighting (NARWC 2021) and acoustic detection (NEFSC 2022) data, recent vessel traffic Automatic Identification System (AIS) data, and information on other relevant planned ocean activities, including offshore wind development.

Additional factors were considered when developing proposed SMA spatial boundaries and timing to optimize effective right whale protection, including minimizing impacts on the regulated community:

- (1) NMFS sought to provide robust protection for right whales over a 10 to 15 year time horizon, and design built-in adaptivity to climate change and other factors to ensure that the speed rule remains resilient to shifts in right whale distribution and habitat use over time. This timeframe also provides a stable and predictable long-term regulatory structure for the maritime community.
- (2) NMFS aimed to identify the smallest spatial and temporal footprint possible for speed restricted areas to minimize the extent of regulatory action while achieving necessary conservation goals. This assumes a framework will be in place to implement mandatory speed restrictions dynamically to address right whales outside the proposed SMAs (see Mandatory Dynamic Speed Zones).
- (3) Changes to speed regulation areas/boundaries focused on reducing vessel traffic operating at speeds in excess of 10 knots (5.1 m/s), since high transit speed is implicated in strike events, and we have the ability to modify this aspect of vessel operation in right whale habitats.

Description of the Vessel Strike Mortality Risk Model

NMFS evaluated the risk of right whales being struck and killed by vessels in U.S. waters along the East Coast using an encounter risk model (Garrison *et al.* 2022). This model simulates the likelihood of a fatal vessel strike based on six sources of information: 1) the spatial distribution and density of right whales; 2) the spatial distribution and amount of vessel traffic; 3) the likelihood that a whale and a particular

vessel will be in close proximity; 4) the likelihood that a whale will be near the surface during the interaction; 5) the likelihood that a whale will successfully move to avoid the interaction; and 6) the likelihood of mortality if a collision occurs. A similar approach was previously applied to large whales on the U.S. West Coast (Rockwood *et al.* 2017, 2020) and right whales occurring off the coast of Florida (Crum *et al.* 2019).

NMFS modeled the spatial distribution of right whales using a compilation of aerial survey data collected by the agency and many different external research groups. The model and approaches are similar to those described in Roberts *et al.* (2016) and Gowan and Ortega-Ortiz (2014) and reflect the distribution of right whales since 2010 (Roberts *et al.* 2021). Environmental variables were used to predict the monthly changes in right whale distribution between Florida and the Nova Scotian shelf.

NMFS characterized vessel traffic using data collected via satellite and terrestrial based AIS that transmits information on vessel movements, speed, and characteristics for those vessels that carry AIS units. For each spatial cell in the right whale distribution model, NMFS summarized the length of transit, time of transit, and average speed of each vessel from the available AIS data. These data were summarized monthly for 2017-2019. Generally, most vessels greater than or equal to 65 ft (19.8 m) in length are required to carry AIS transceivers. While many vessels less than 65 ft (19.8 m) in length also carry AIS, they are likely to be under-represented in these data, and therefore, the risk of interactions with right whales is under-represented in the model.

NMFS modeled the likelihood of a whale-vessel encounter using the approach described in Martin *et al.* (2015), where the probability of close encounter between a whale and a vessel within a given spatial cell is a function of vessel size, whale swimming speed, and vessel speed. Given a close encounter, the probability that a whale will be near the surface (in the upper 10 m (32.8 ft) of the water column) where it would be susceptible to a vessel strike was estimated based on available data on dive-surface

behavior from animal-borne tags from different regions where whales occur (Baumgartner and Mate 2003; McGregor and Elizabeth 2010; Parks *et al.* 2011; Baumgartner *et al.* 2017; Dombroski *et al.* 2021).

It remains unclear how right whales respond to close approaches by vessels (<1509 ft (460 m)) and the extent to which this allows them to avoid being struck. Rockwood *et al.* (2017) and Crum *et al.* (2019) examined different ways of accounting for avoidance behaviors within encounter risk models. Conn and Silber (2013) indicated that encounter rates were higher with fast-moving vessels than expected, which may be consistent with successful avoidance of slower vessels by whales. NMFS' model included a potential avoidance behavior accounting for random effects of the distance at which a whale reacts, the speed the whale swims to escape, and the direction the whale chooses to swim. This approach accounts for the increased likelihood that a whale will escape a slower moving vessel and includes the large amount of uncertainty in whale behavioral response to approaching vessels.

In this framework, if a collision between a whale and a vessel occurs, the likelihood that the collision will be fatal is a function of vessel speed. NMFS applied the model of Conn and Silber (2013) to evaluate this probability. It should be noted that the data in this model are primarily from larger vessels, so it may be less appropriate for some of the small vessels included in the current analysis.

Application of the Vessel Strike Mortality Risk Model

We used the mortality risk model (Garrison *et al.* 2022) to evaluate areas and times with the highest risk of vessel strike mortalities for right whales. Areas of highest risk are primarily associated with places where there is both a high density of vessel traffic and high density of right whales. In U.S. waters, these areas correspond generally to the Atlantic East Coast region, particularly between late fall and early spring (November through April). The highest risk areas occurred in the Mid-Atlantic between

Cape Hatteras, North Carolina, and New York, and in relatively shallow waters over the continental shelf. High-density vessel traffic areas in approaches to major commercial ports pose the greatest risk of vessel strike mortalities. While vessels less than 65 ft (19.8 m) in length are under-represented in the AIS data, the spatial distribution of the risk of interactions with these vessels were also examined. In general, the risk of interactions with vessels less than 65 ft (19.8 m) in length was higher close to shore. NMFS examined the monthly spatial distribution of vessel strike risk to identify regions and times where slowing vessel traffic to speeds less than 10 knots (5.1 m/s) would have the greatest impact on reducing the overall risk of vessel strike mortalities for right whales.

Once these spatio-temporal areas were identified, NMFS compared them with additional opportunistic and survey-based right whale sightings information, including demographics, acoustic detections of right whale presence, and additional information, where available, on possible future activities that might impact vessel traffic, including proposed and leased wind energy sites and U.S. Coast Guard proposed vessel safety fairways (85 FR 37034, June 19, 2020). It is important to note that the risk model is not informed by right whale sightings prior to 2010, opportunistic sightings, or acoustic detections. Additionally, as discussed above, vessel traffic from boats less than 65 ft (19.8 m) in length are under-represented in the model. Comparing these additional data with areas identified by the risk model informed optimal revised SMA boundaries based on the totality of information available.

NMFS then used the risk model to simulate the maximum overall reduction in risk of lethal right whale strikes that could be achieved with the revised SMA boundaries. The revised boundaries were identified based on evaluation of those areas and times with the greatest chance of reducing lethal strikes to right whales. For the simulation, we artificially set the speed of transits within the revised SMA time-space boundary that had an average speed greater than 10 knots (5.1 m/s) to the 10-knot (5.1 m/s) speed that

would be required. We then re-calculated the total risk of vessel strike mortality for this simulated dataset and compared to the status quo, thereby providing an estimate of the lethal strike risk reduction, in time and space, should the SMA boundaries be revised to be the expanded SSZs.

Based on this analysis of the proposed SMA boundaries and the additional risk reduction expected to accrue from the use of mandatory DSZs (see Mandatory Dynamic Speed Zones), NMFS anticipates the proposed revisions would address over 90% percent of the risk reduction that can be achieved by reducing vessel speeds to 10 knots (5.1 m/s), relative to the status quo. While the risk model underestimates the strike risk associated with traffic from vessels greater than 35 ft (10.7 m) to less than 65 ft (19.8 m) in length, given the expected coastal distribution of this traffic based on available data, we anticipate this component of strike risk will be sufficiently accounted for by the revised SMA boundaries/timing.

Proposed Boundaries and Effective Periods for Seasonal Speed Zones

NMFS proposes changes to the current boundaries and effective periods of the areas seasonally subject to the 10-knot (5.1 m/s) speed restriction along the U.S. East Coast to better address the ongoing risk of right whale mortality and serious injury from vessel collisions (Figure 1). To more accurately describe them, we will refer to the areas as Seasonal Speed Zones (SSZs) (rather than Seasonal Management Areas or SMAs). The new SSZs include substantial spatial and temporal changes in the Northeast and Mid-Atlantic regions, and more modest changes in the Southeast region. The proposed SSZs with effective dates each year are summarized as follows with geographic coordinates provided in the proposed regulatory text:

- (1) Atlantic Zone (November 1 - May 30)
- (2) Great South Channel Zone (April 1 - June 30)
- (3) North Carolina Zone (November 1 - April 30)

(4) South Carolina Zone (November 1 - April 15)

(5) Southeast Zone (November 15 - April 15)

NMFS proposes no active SSZs between July and October, and only the Great South Channel Zone would be active during the month of June. This is consistent with data showing fewer right whales present in U.S. waters during this time period. Proposed SSZs were developed with the understanding that DSZs would be used to implement mandatory speed restrictions when appropriate outside of active SSZs. NMFS anticipates that the combination of SSZs and DSZs will provide the spatial and temporal coverage necessary to significantly reduce the risk of lethal strike events attributable to vessel traffic transiting in excess of 10 knots (5.1 m/s).

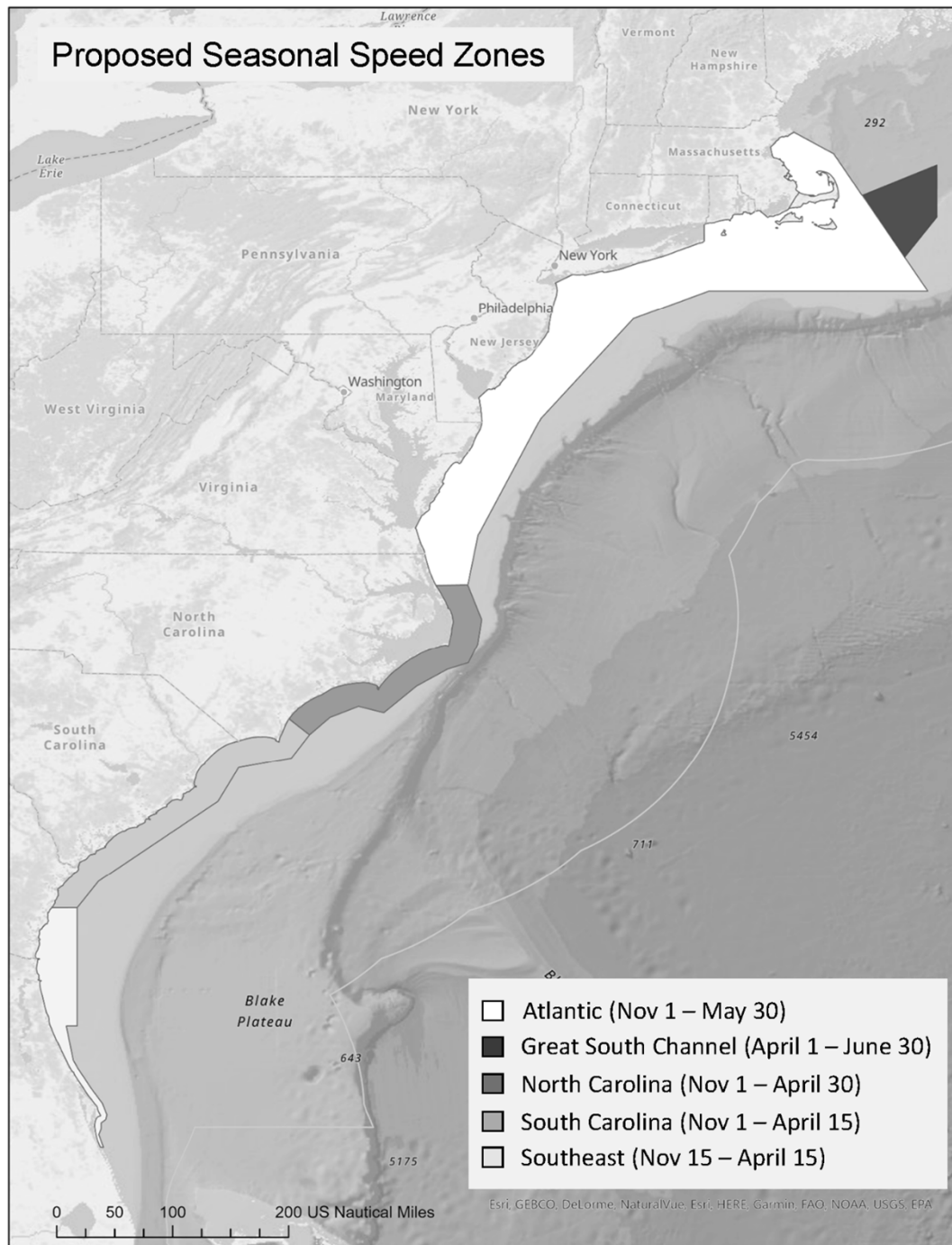


Figure 1: Proposed Seasonal Speed Zones and Effective Dates Each Year

Regulation of Most Vessels Greater Than or Equal to 35 ft (10.7 m) in Length

The existing North Atlantic right whale vessel speed rule (50 CFR 224.105) does not address the threat of mortalities and serious injuries from strike events involving vessels less than 65 ft (19.8 m) in length. Recent vessel strike events have highlighted the lethality of collisions involving vessel sizes not subject to the existing speed rule. Since 2020 alone, four right whale vessel strikes in U.S. waters resulted in mortalities and serious injuries: (1) a calf was seriously injured off Florida/Georgia in January 2020; (2) a calf was killed off New Jersey in June 2020; (3) a calf was killed off Florida in February 2021; and (4) its mother was seriously injured by the same vessel. For three of the four events, the vessels involved in the collisions were known to be between 35 (10.7 m) and 65 ft (19.8 m) in length and traveling in excess of 20 knots (10.3 m/s) at the time.

Since 2005, operators of vessels less than 65 ft (19.8 m) in length have reported eight right whale vessel strikes in U.S. waters. Six resulted in right whale serious injuries or mortalities. The reporting vessels ranged in length from 17-54 ft (5.2-16.5 m), with vessels involved in mortality and serious injury events ranging in size from 42-54 ft (12.8-16.5 m) in overall length. The vessel speeds at the time of the strike events ranged from less than 5 knots (2.6 m/s) to approximately 28 knots (14.4 m/s) (Henry *et al.* 2011, 2021; Wiley *et al.* 2016). Of the eight strike events involving vessels less than 65 ft (19.8 m) since 2005, five (including the recent strikes involving a mother/calf pair) occurred within active SMAs where most vessels 65 ft (19.8 m) and over are required to travel at 10 knots (5.1 m/s) or less.

In seven of the eight events involving vessels less than 65 ft (19.8 m) in length, mariners reported no sighting of the whales prior to impact with the vessel. Vessel strikes can occur even when circumstances are seemingly optimal for avoidance as illustrated by two right whale vessel strikes involving research vessels less than 65 ft (19.8 m) in length with trained observers aboard that occurred in Cape Cod Bay during daylight hours

(Wiley *et al.* 2016). These events demonstrate that mariner experience and vigilance alone can be insufficient to protect against vessel collisions.

Furthermore, since 2009, operators of vessels less than 65 ft (19.8 m) in length have reported an additional six vessel collisions (including five serious injuries) with undetermined large whale species in U.S. waters that may have involved right whales based on the location and timing of the events (Henry *et al.* 2017). Documented vessel strike deaths of Southern right whales (*Eubalaena australis*) off Australia and South Africa involving a 34-ft (10.4-m) vessel and 44-ft (13.4-m) vessel respectively, further demonstrate the lethal risk vessels less than 65 ft (19.8 m) in length can pose to right whale species more broadly (Peel *et al.* 2016; Vermeulen *et al.* 2021).

Other jurisdictions have instituted speed restrictions for vessels less than 65 ft (19.8 m) in length to mitigate vessel strike risk for North Atlantic right whales. Following a series of right whale vessel strike events, Canada expanded the length of vessels covered by dynamic mandatory 10-knot (5.1 m/s) speed restrictions in the Gulf of St. Lawrence in 2019 to include vessels 13 m (42.7 ft) or greater in length. Also in 2019, the state of Massachusetts introduced regulations restricting the speed of most vessels less than 65 ft (19.8 m) in length to 10 knots (5.1 m/s) or less when transiting through waters within, and to the north of, Cape Cod Bay during the months of March and April each year to provide protection for foraging right whales following vessel strike events in the Bay (322 CMR 12.05). Massachusetts has received no reports of strikes involving vessels less than 65 ft (19.8 m) in length, nor reports of safety concerns from mariners in this area since implementation of the regulation. The State has extended these vessel speed restrictions into the month of May during years when right whales remained in the Bay.

Collisions with vessels less than 65 ft (19.8 m) in length pose a danger to both the whale and vessel occupants. There are numerous cases from around the world of vessels sustaining significant damage, and even sinking, following collisions with whales (Ritter

2012; Peel *et al.* 2018). For example, two vessel-whale collisions that occurred in March 2009 and February 2021 resulted in vessel damage significant enough to require passenger rescue by the U.S. Coast Guard. Sailing vessels can be at particular risk of substantial damage due to their deliberately light construction (Ritter 2012) even though most transit at speeds at or under 10 knots (5.1 m/s). Moreover, collisions with vessels less than 65 ft (19.8 m) in length with whales have resulted in injuries to vessel occupants (NMFS unpublished data).

For the reasons detailed above, NMFS proposes to expand the size class of vessels currently subject to speed restrictions to include most vessels greater than or equal to 35 ft (10.7 m) to less than 65 ft (19.8 m) in overall length. Most vessels within this size class are not subject to U.S. Coast Guard AIS carriage requirements, but based on limited available AIS data and U.S. Coast Guard vessel registration data (USCG 2021), this change may affect up to 8,500-10,000 vessels (albeit to varying degrees). Best estimates indicate that approximately 80 percent of these vessels are larger recreational boats, with commercial fishing (7 percent) and passenger vessels (6 percent) the next most common types. The remaining vessel types include work boats, pilot boats, tug and tow vessels, and other commercial vessels. The total number of affected vessels is likely substantially overestimated, particularly for recreational boats, since available data lack detail about where, when, and how frequently a boat operates within areas subject to speed regulation.

Mandatory Dynamic Speed Zones

Though NMFS' 2006 proposed speed rule included the concept of mandatory DMA speed restrictions that fall outside active SMAs (71 FR 36299, June 26, 2006), the 2008 final speed rule did not. Instead, the agency announced it would implement a voluntary DMA program creating short-term "dynamic" areas within which NMFS sought voluntary compliance with restricted speeds based on sightings of right whale aggregations. In 2020, NMFS modified the DMA program to include acoustically

triggered Right Whale Slow Zones in the NMFS Greater Atlantic Region (Maine to Virginia), given the increasing availability of near-real time acoustic detectors able to accurately identify right whale presence. If followed, dynamic speed reduction areas provide vessel strike risk reduction to aggregations of right whales or areas with persistent right whale presence outside active SMAs in near-real time. The program was intended to provide protection for right whales in areas/times not covered by SMAs. As discussed above, shifts in right whale distribution and habitat use since the current SMAs were established in 2008 have resulted in a substantial number of DMA and Slow Zone declarations.

NMFS 2008 speed rule stated the agency would “monitor voluntary compliance” and if cooperation was not satisfactory would “consider making them mandatory, through a subsequent rulemaking” (73 FR 60173, October 10, 2008). Despite NMFS’ best efforts to reach out to vessel operators about dynamic speed reduction areas and educate the maritime community about the need for right whale vessel strike mitigation, NMFS’ speed rule assessment determined that vessel cooperation levels are low, and therefore, the reduction in risk provided by the voluntary DMAs is minimal (NMFS 2020).

As discussed above, the proposed SSZs boundaries/timing are designed to address most vessel strike risk attributable to vessels transiting in excess of 10 knots (5.1 m/s). Based on an evaluation of recent voluntary DMAs and acoustically triggered Slow Zones, 54 of the 67 DMAs/Slow Zones triggered during 2021 (80.6 percent) would fall within the proposed SSZs. In other words, only 13 (19.4 percent) of 2021 DMAs/Slow Zones would have been triggered if the proposed SSZ boundaries were in effect. This indicates that the existing misalignment between the current SMA boundaries and elevated risk areas is substantially, but not wholly, captured by the proposed SSZs. Thus, even after adjusting the geographic boundaries and timing of the static SSZs to more accurately reflect the best available data on right whales and vessel strike risk, there is still a role for

dynamic speed restrictions to protect other areas where right whales occur less predictably.

In examining the totality of information available to inform changes to the location and timing of SSZ boundaries, it became clear that for some areas and seasons, static speed management may not be sufficient as a sole strategy to reduce vessel strike risk. This is primarily the case in areas where right whale presence is less predictable or more ephemeral and/or where elevated strike risk is more moderate.

Static speed restrictions best serve areas with reliable right whale presence and elevated strike risk. For example, right whales reliably occur within the South Atlantic Bight calving ground each and every season (November through April). The total number of individuals present will vary from year to year (Krzystan *et al.* 2018), but this calving, and likely mating, habitat is an essential area for right whale reproduction and is designated (81 FR 4837, January 27, 2016) as critical habitat under the ESA. The consistency of right whale presence (especially vulnerable mothers/calf pairs) combined with high levels of vessel traffic along the Southeast coast are the primary reasons vessel strike risk in this region is best managed via a static SSZ.

In other times/areas, however, right whale presence may be less predictable and/or elevated vessel strike risk more moderate. For example, during late fall and winter, right whales have been documented over many years in the central Gulf of Maine, frequently engaged in foraging. Right whales have been visually or acoustically detected in this area during most, but not every fall/winter season, and vessel strike risk is lower in this area, relative to other parts of the U.S. East Coast, due to lower levels of vessel traffic transiting at high speeds. Vessel strike risk modeling indicates a benefit to right whales from vessel speed restriction in this area but to a lesser degree than other places/times. With adequate seasonal monitoring for right whale presence, a dynamic

area speed restriction is ideally positioned to provide vessel strike protection in this area when and where it will be most beneficial to right whale conservation.

To address elevated vessel strike risk in areas outside SSZs, NMFS is proposing to implement a mandatory DSZ framework to replace the current voluntary DMA/Slow Zone program. Under this proposed framework protocol, as described below, a mandatory DSZ would be created for an area outside an active SSZ, within U.S. waters from Maine to Florida, based on (1) a confirmed visual sighting of a right whale aggregation (three or more whales in close proximity) or a confirmed right whale acoustic detection (since it is not possible to quantify the number of individual whales present) and (2) NMFS determination that the area to be designated as a DSZ has a greater than 50 percent likelihood of right whale presence during a minimum effective period of 10 days (periods shorter than this may present practical challenges for implementation).

Existing protocols for the current voluntary DMA/Slow Zone program are proposed as a minimum trigger threshold to inform a new DSZ. Under these protocols, NMFS establishes voluntary 15-day DMAs when three or more right whales are sighted within close proximity. Depending on the size and geographic spread of the right whale aggregation, the spatial extent of the DMA is determined based on a local density method as outlined in Clapham and Pace (2001), with most zones approximately 400 square nautical miles (sq nm; 1372 sq kilometers (sq km)). NMFS declares voluntary Slow Zones in the NMFS Greater Atlantic Region when a right whale acoustic detection is confirmed. Acoustically triggered Slow Zones extend approximately 20 nm from the detection source and remain effective for 15 days. DMAs/Slow Zones may be extended if additional sightings or acoustic detections meeting the thresholds above are detected within the latter half of the 15 day effective period. Once the initial detection trigger has been met, NMFS would then determine whether the potential DSZ has a greater than 50

percent likelihood that right whales would continue to be present within the zone (not to exceed 2500 sq nm (8575 sq km) commensurate with the size of the aggregation for visual detections or 400 sq nm (1372 sq km) for acoustic detections). As with the current voluntary DMA/Slow Zone program, DSZs may be extended if additional sightings or acoustic detections meeting the minimum thresholds occur within the effective period.

Drawing upon the agency's long-time expertise implementing voluntary dynamic areas over the last 13 years, NMFS' process for determining and implementing DSZs would follow an objective, rigorous and replicable protocol, informed by inputs such as the number of right whales detected, the dispersion of the aggregation, and whale behavior (if known). Furthermore, NMFS would provide details of the DSZ determination when providing public notice of a DSZ designation. Ensuring that DSZs meet a minimum trigger threshold and a greater than 50 percent likelihood of continued right whale presence standard would provide confidence that these zones will effectively achieve the goal of providing targeted protection to right whales (in areas not protected by static zones) from elevated vessel strike risk while avoiding unnecessary regulation of vessel speed.

The boundaries and timing of temporary DSZs for right whales are by their very nature uncertain until the conditions that trigger one are present. Once those conditions are determined to be in place, however, the need for those DSZs to be effective to protect right whales is immediate. Implementing DSZs through publication of *Federal Register* notices does not allow for timely implementation of a DSZ and could result in unnecessary avoidable risk of both vessel strikes of right whales and potentially mariner safety. The time normally required to file and publish a DSZ's boundaries and effective period in the *Federal Register* would delay implementation and diminish the value and effectiveness. Thus, this proposed rule allows NMFS to implement timely DSZs without prior publication in the *Federal Register* as follows.

When NMFS determines that the criteria for establishing a DSZ, or DSZ extension, have been met, NMFS will announce notice of the DSZ or DSZ extension through publication on the agency's website, via U.S. Coast Guard Notices to Mariners, NOAA Weather Radio announcements, and through other practicable appropriate means, as well as by Notice in the *Federal Register* as soon as practicable. NMFS requests public comment on other effective means for notifying the public, including social media, smartphone apps, email notifications and text alerts to which mariners, harbormasters, port officials, pilots, and the public can subscribe. As stated earlier, the proposed SSZs will accrue a net expansion of vessel strike risk coverage compared to the areas in the current speed regulation, including many areas/times where voluntary DMAs and Slow Zones have been common. NMFS anticipates that under the proposed DSZs framework, the prevalence of these zones will be less frequent, given the more rigorous coverage provided by the proposed SSZ boundaries. Additionally, since 2008, nearly all voluntary DMAs and Slow Zones were triggered on the continental shelf, with 93 percent occurring in the NMFS Greater Atlantic Region (Maine to Virginia). Accordingly, NMFS anticipates that proposed DSZs would continue to be most common north of North Carolina and within coastal and shelf waters.

NMFS requests public comment on the proposed DSZ framework for the proposed mandatory DSZ program. NMFS particularly invites comment on: 1) the geographic areas that should be subject to mandatory DSZs; 2) the appropriate design of trigger thresholds using confirmed right whale acoustic and/or visual detections as well as the appropriate methodology for determining spatial extent as it relates to the greater than 50 percent likelihood standard for presence; and 3) the forms of notice mariners would find most practicable for receiving timely declarations of new DSZs.

The use of dynamic strategies to manage vessel speed for right whale protection is already customary, and employed in U.S. waters. The State of Massachusetts

dynamically extends the effective period of its small vessel speed restrictions in Cape Cod Bay if the continued presence of right whales is detected in the Bay, as the State did in 2021 (Massachusetts Division of Marine Fisheries 2021). NMFS' long-time (since 1997) approach regulations also require mariners to modify their vessel operations (including speed and/or direction of travel) in real-time if they encounter right whales while transiting. Mariners must remain 500 yards (457.2 m) away from right whales unless compliance would create a serious threat to vessel safety. This strategy is also used in Canadian waters. Since 2018, Canada has implemented a seasonal system of mandatory dynamic right whale speed restrictions within the Gulf of St Lawrence shipping lanes and during the summer, creates a dynamic Restricted Area to further protect foraging aggregations, as needed, based on right whale detections, and announced through Transport Canada Ship Safety Bulletins (Transport Canada 2021a, 2021b).

Year-round visual and acoustic monitoring of right whale habitat outside proposed active SSZs will be essential to the effectiveness of the proposed mandatory DSZs. NMFS' coast-wide vessel strike mortality risk model indicates where and when elevated strike risk is present, and can serve as a resource for identifying monitoring needs (Garrison *et al.* 2022). In 2019, NMFS convened an expert working group to provide recommendations to enhance right whale monitoring along the U.S. East Coast. The effort culminated in a detailed report that included recommendations for monitoring right whale distribution (Oleson *et al.* 2020). NMFS continues to review recommendations from the monitoring report and is taking monitoring needs for proposed mandatory DSZs into consideration as it works with external partners to optimize right whale monitoring efforts.

Updates to Safety Deviation Provisions

NMFS established a safety deviation provision within the 2008 speed rule (50 CFR 224.105) to accommodate situations where transit at speeds of 10 knots (5.1 m/s) or

less during severe conditions would threaten human or navigational safety. Following a review of vessel transit data and compliance information as part of the speed rule assessment (NMFS 2020), NMFS investigated options to better understand the extent of safety impacts from the speed rule and to monitor use of the safety deviation provision. Current regulations lack a mechanism by which the agency can efficiently identify which vessels are employing the safety deviation and when and where use of the safety deviation may be common. Existing information collection protocols lack sufficient detail to determine the circumstances surrounding a deviation and to assess situations where a vessel may lack reasonable grounds to employ the safety deviation. NMFS further recognizes that the current safety deviation language lacks recognition of emergency situations that do not involve a maneuverability issue, when a vessel may have immediate cause to exceed the 10-knot (5.1 m/s) speed restriction due to a medical or other emergency involving the health or life of a vessel passenger.

The proposed inclusion of vessels less than 65 ft (19.8 m) in length within the vessel size class subject to speed regulation presents a new safety issue unique to smaller and lighter boats. During severe weather conditions, vessels less than 65 ft (19.8 m) in length may face maneuverability and associated safety issues. While some vessel operators can easily avoid such conditions, others may need to be out on the water during severe weather events to provide essential maritime services, or as a part of other work obligations.

To address the issues stated above, NMFS proposes to retain the current safety deviation provision with several changes:

- 1) Expansion of the safety deviation provision to include emergency situations that present a threat to the health, safety, or life of a person;
- 2) Inclusion of a new provision, applicable only to vessels less than 65 ft (19.8 m) in length, which allows such vessels to transit at speeds greater than 10 knots (5.1

m/s) within areas where a National Weather Service Gale Warning, or other National Weather Service Warning (*e.g.*, Storm Warning, Hurricane Warning) for wind speeds exceeding those that trigger a Gale Warning is in effect. No reporting of these speed deviations would be required; and

- 3) Modification of the safety deviation reporting protocols to eliminate the vessel logbook entry requirement in favor of a new requirement for vessels to submit an online report to NMFS within 48 hours of employing a safety deviation detailing the circumstances and need for the deviation.

The proposed regulations would require a vessel operator to submit, via a NMFS website, the same information currently contained in the logbook entry along with new information relevant to the deviation event, including:

- (1) Vessel name, length overall, draft (at the time of the deviation) and where applicable, the vessel IMO number and Maritime Mobile Service Identity (MMSI) number;
- (2) Reason for the deviation: a) maneuverability constraints, or b) emergency;
- (3) Date, time, latitude, and longitude where deviation began;
- (4) Date, time, latitude, and longitude where deviation ended;
- (5) Speed or average speed at which the vessel transited during the deviation;
- (6) Wind speed and direction at the time of the deviation;
- (7) Information on water current speed and direction at the time of the deviation, including measurements from the vessel acoustic doppler current profiler (ADCP), if the vessel is equipped with this device;
- (8) If the vessel was operating within a restricted/dredged channel, indicate whether one-way or two-way vessel traffic was present within the channel at the time the deviation was employed;

- (9) The vessel master, and, if the vessel was under pilotage, the pilot, must attest to the accuracy of the information contained within the Report. If the vessel was under pilotage, indicate the name of the harbor pilot;
- (10) Opportunity to briefly provide additional narrative (300 word limit), if desired, to explain the circumstances of a safety deviation.

NMFS specifically invites comment on the proposed reporting requirements, including comments on whether a web-based reporting mechanism is practicable for mariners, who should be responsible for completing and attesting to reports (for example, whether pilots should be responsible for completing and attesting to reports when a vessel is under pilotage), and on requiring more robust logbook recordkeeping in lieu of the new reporting requirements proposed herein.

NMFS recognizes that under certain conditions, vessel maneuverability and/or navigational safety may be hampered by transiting at reduced speeds, especially within port entrance areas. NMFS' current and proposed speed regulations acknowledge this through the safety deviation provision that is available when vessel maneuverability is compromised by the speed restriction. Given the totality of changes proposed herein, particularly the expanded size class of vessels subject to regulation, most pilot vessels operating within port entrance areas will likely be newly subject to speed regulation. NMFS solicits comments on options for alternative speed reduction programs specifically within port entrance areas that best maintain navigational safety while providing comparable vessel strike protections to right whales. Alternative programs would be conducted and resourced by external partners, include comprehensive monitoring of right whale presence, and provide a level of vessel strike risk reduction equivalent to that achieved through the measures described in this rule.

Additional Enforcement Clarifications

NMFS is also clarifying that the prohibitions set forth in Section 9(g) of the ESA would apply to the speed restrictions and reporting requirements set forth in this rule. Additionally, consistent with Section 10(g) of the ESA, NMFS clarifies that any person claiming the benefit of an exception to this rule has the burden of proving that the exception applies. Sections 9(g) and 10(g) of the ESA would apply irrespective of these changes. However, NMFS believes it is appropriate to provide additional notice to the public of how these provisions would apply under the proposed rule. This clarification would also provide consistency with other rules designed to protect North Atlantic right whales. With limited exception, regulations at 50 CFR 224.103(c) currently provide that it is unlawful “to commit, attempt to commit, to solicit another to commit, or cause to be committed” an approach within 500 yard of a North Atlantic right whale. The approach regulation also makes clear that a person claiming the applicability of an exception has the burden of proving that the exception applies.

Vessel Exemptions

The proposed rule includes one change to the exemptions for certain vessels at 50 CFR 224.105(a). Currently the speed regulations exempt vessels that are owned or operated by, or under contract to, the Federal Government, and that exemption extends to foreign sovereign vessels when they are engaging in joint exercises with the U.S. Department of the Navy. This proposed rule would extend the exemption to foreign sovereign vessels engaging in joint exercises with the U.S. Coast Guard. All other exemptions remain unchanged. As stated earlier, an exemption from the speed regulations does not affect a federal agency’s consultation requirement under section 7 of the ESA, and reduced speeds may be recommended or specified as part of a section 7 consultation to reduce the threat of vessels collisions with right whales. Federal action agencies should continue to monitor their actions to determine if reinitiation of a

consultation is warranted based on triggers specified at 50 CFR 402.16. This proposed action, however, does not provide a basis for reinitiation.

Stakeholder Considerations

NMFS designed the proposed changes to provide necessary enhanced protection for endangered right whales while minimizing impacts on human use of ocean resources for commerce and recreation. NMFS recognizes that vessels regularly operating at speeds in excess of 10 knots within areas/times designated for speed restriction in this proposed rule will likely experience delayed transit times within these areas, although there will be no restrictions on when or where a vessel may transit.

In addition to considering public comments from stakeholders regarding impacts of the proposed rule, NMFS will continue to work with key federal partners, including the U.S. Coast Guard, Bureau of Ocean Energy Management, U.S. Army Corps of Engineers, and Marine Mammal Commission, to ensure mariner safety and address stakeholder concerns regarding the proposed changes. For example, NMFS is aware of the nascent offshore wind energy industry and the substantial overlap of likely future wind energy development with the proposed Seasonal Speed Zones, possible Dynamic Speed Zones, and right whale habitat generally. The proposed changes would provide a stable regulatory landscape for companies as they plan future vessel-based operations for offshore energy construction and long-term management, while providing necessary protection for right whales throughout the U.S. portions of their habitat.

NMFS anticipates the proposed rule will impact a larger number of recreational boaters and anglers than the current rule, due mostly to the inclusion of vessels equal to or greater than 35 ft in length. Recreational fishing is widely enjoyed and generates billions of dollars in overall economic contribution along the U.S. East Coast (Lovell et al. 2020). To better understand the impacts of the proposed rule on recreational angling,

NMFS invites public comment on the degree to which the mandatory speed limit (for most vessels equal to or greater than 35 ft in length) may impact recreational angling within the active proposed Seasonal Speed Zones and Dynamic Speed Zones. NMFS anticipates that the seasonal nature of most speed restrictions will minimize the impacts of the proposed rule on recreational activities. In the Southeast and Mid-Atlantic, the proposed restrictions will be in effect during seasons with less recreational angler activity. In the greater New England area, most seasonal speed restrictions occur during periods of colder weather, when recreational activity is low, although this region is most likely to see Dynamic Speed Zones triggered during seasons of higher recreational activity based on right whale distribution data.

Other Considerations

In addition to the proposed vessel speed measures herein, NMFS plans to continue an ongoing review of vessel routing measures to examine the effectiveness of such measures and investigate opportunities to further reduce the spatial and temporal overlap of vessels and right whales through routing measures, if warranted. Effective outreach to the mariner community remains an important means of ensuring speed regulations are understood and adhered to by the regulated community. NMFS is engaged in ongoing research to identify effective means to communicate with this community.

NMFS also recognizes the role whale avoidance technologies may one day play in preventing vessel collisions, and remains open to the future application of these technologies, if proven safe and effective. The use of onboard marine mammal observers is another strategy employed to reduce vessel strike events. For some activities and vessel types, the addition of marine mammal observers can provide an added mechanism to prevent vessel strikes in conjunction with other conservation measures; however, documented right whale vessel strikes involving vessels with trained observers demonstrate the inconsistency of this tool.

While the proposed rule is designed to address lethal right whale vessel strike risk, NMFS anticipates ancillary benefits, including reduced vessel strike risk, will accrue to other marine species. Endangered and protected cetaceans, pinnipeds, sea turtles, and certain fish species inhabit the regions/seasons covered by the proposed action. Vessel strikes are an ongoing threat to all large whale species and are contributing to two ongoing Unusual Mortality Events involving minke (*Balaenoptera acutorostrata*) and humpback whales (*Megaptera novaeangliae*). Researchers have found that the majority of large whale vessel strike mortalities involve vessels transiting at speeds greater than 10 knots (Laist *et al.* 2001; Jensen and Silber 2004; Vanderlaan and Taggart 2007; Conn and Silber 2013). NMFS expects both the spatial and temporal expansion of SSZs and inclusion of vessels equal to or greater than 35 ft in length will provide additional beneficial vessel strike risk reduction to other large whale species.

Numerous studies have linked reduced vessel transit speeds with a reduction in ocean noise (McKenna *et al.* 2012, 2013; Leaper *et al.* 2014; Gassmann *et al.* 2017; MacGillivray *et al.* 2019; Duarte *et al.* 2021). The proposed rule is expected to reduce radiated underwater ocean noise particularly in areas where substantial numbers of vessels would slow their speeds to 10 knots (5.1 m/s) or less. This change in speed would subsequently reduce noise disturbances, such as sound masking, for marine species occurring in overlapping areas/seasons. Additionally, for certain vessel types, the proposed rule is expected to result in reduced fuel use, and thus emissions, by slowing more vessels over a larger net spatial and temporal area compared to current conditions. NMFS anticipates these reductions would contribute to enhanced air quality, and support lower fossil fuel emissions, a priority for climate change mitigation, benefiting both human health and marine species.

As with the current speed regulation, NMFS recognizes that vessel compliance and effective enforcement is critical to the effectiveness of the proposed rule. Overall

vessel compliance with the current speed rule is monitored based on protocols and procedures outlined in the 2020 vessel speed rule assessment (NMFS 2020). NMFS uses the distance weighted average vessel speed to identify sections of transits that exceed 10 knots and considers the total distance at or under 10 knots as the best metric of apparent compliance. NMFS has seen increasing levels of vessel compliance over time since the speed rule first went into effect in 2008.

NOAA has already taken steps to address ongoing enforcement challenges and prepare for new challenges resulting from the inclusion of vessels equal to or greater than 35 ft in length. Specifically, the Office of Law Enforcement has upgraded capabilities for tracking vessel speed at sea, initiated research of new vessel tracking technologies, and started investigating land-based and aerial monitoring options. NMFS has also commenced staff level discussions with the U.S. Coast Guard regarding possible modification of current AIS carriage requirements to include additional vessel types and sizes. Furthermore, as discussed above, NMFS is proposing changes to the speed rule specifically designed to enhance monitoring and enforcement.

The inclusion of vessels equal to or greater than 35 ft in length under the proposed rule will involve some increased enforcement costs since many vessels in this size class are not equipped with AIS and cannot be monitored in the same way as AIS-equipped vessels. Moving forward, NOAA believes a diversified enforcement approach is needed. This would involve expanding at-sea operations in appropriate locations, using additional technologies to monitor vessel speed, providing compliance assistance to the regulated community, including outreach, and bringing enforcement cases in appropriate circumstances.

These enhancements to NOAA's enforcement efforts are not expected to substantially raise costs. NOAA intends to efficiently and effectively enforce the

proposed rule building upon ongoing at-sea enforcement efforts, and we anticipate receiving continued assistance from enforcement partners such as the U.S. Coast Guard and State law enforcement agencies. The increase in potentially affected vessels under the proposed rule is not necessarily commensurate with an increase in enforcement costs. While more vessels may be subject to speed regulation under the proposed rule, enforcement will focus on those vessels posing the greatest risk to right whales. Proposed changes to the safety deviation reporting protocols should also streamline enforcement.

NOAA brings civil administrative enforcement cases to achieve both specific and general deterrence. Violations of the current speed rule can result in significant monetary penalties, which serve as a deterrent to other potential violators. Outreach can also be an effective tool to improve compliance. This year, NOAA sent approximately 400 letters to vessels suspected of violating the speed limit to encourage compliance. NOAA is committed to continuing and expanding outreach efforts under the proposed rule.

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Classification

NMFS is proposing this rule pursuant to its rulemaking authority under MMPA section 112(a) (16 U.S.C. 1382(a)), and ESA section 11(f) (16 U.S.C. 1540(f)).

A Draft Environmental Assessment for this proposed action was prepared and is available at <https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-vessel-strikes-north-atlantic-right-whales>.

An informal consultation under ESA section 7 is currently underway for this proposed action. Consultation will be completed before a final rule is issued.

This proposed rule has been determined to be significant under E.O. 12866 and NMFS has prepared a draft Regulatory Impact Review (RIR). NMFS estimates that approximately 15,899 vessels would be affected by the proposed revisions to the current speed rule at an estimated cost of just over \$46 million per year. Affected vessels include those that are: 1) subject to speed regulation and 2) documented or estimated to transit in excess of 10 knots (5.1 m/s) within the proposed SSZs and potential DSZs. Of the 15,899 vessels identified, 9220 (59 percent) are recreational/pleasure boats, 3575 (22 percent) are ocean-going commercial ships, and 3124 (19 percent) are commercial, industrial and other vessel types, although the number of affected vessels less than 65 ft (19.8 m) is likely overestimated. The largest proportion of the overall estimated cost of the proposed changes is borne by ocean-going commercial ships (35 percent) followed by passenger vessels (26 percent) and industrial work vessels (18 percent). NMFS invites public comment on potential economic, operational or safety impacts from the proposed changes.

NMFS prepared an Initial Regulatory Flexibility Analysis (IRFA) as required by section 603 of the Regulatory Flexibility Act. The IRFA describes the economic impact

this proposed rule, if adopted, would have on small entities. We anticipate a total of 2524 small entities (individual vessels) would be affected by the proposed rule with an estimated annual cost, as a percentage of revenue, ranging from 0.06% to 2.09%, depending on the vessel type, with passenger and pilot vessels most impacted. Commercial fishing and passenger vessel entities make up a combined 60% of the total small entities affected by the rule, although as a proportion of revenue the cost of this impact is substantially lower for commercial fishing vessels. A full description of the proposed action, and the legal basis and objectives of the action, are discussed above and are not repeated here.

The proposed action includes no day-to-day reporting requirements. A vessel operator only needs to submit a brief electronic report to NMFS if they use the safety deviation provision due to limited maneuverability affecting vessel safety or an emergency. Since these safety/emergency situations are expected to be rare, the impact on small entities should be minimal. No special professional skills are needed to submit the report other than knowledge of the vessel and the conditions relevant to the safety deviation.

NMFS considered a number of alternatives in its Draft RIR and Draft Environmental Assessment but did not identify any significant alternatives which would accomplish the stated objective of this proposed rule. Alternatives considered included:

- 1) Alternative 1 (No Action Alternative) would maintain the status quo. No action would be taken and vessel traffic along the U.S. East Coast would continue as is under 50 CFR 224.105.
- 2) Alternative 2 would restrict the speed of most vessels greater than or equal to 35 ft (10.7 m) and less than 65 ft (19.8 m) in length to 10 knots (5.1 m/s) or less within existing SMAs.

- 3) Alternative 3 would modify the spatial and temporal boundaries of the existing SMAs to create newly proposed SSZs. The size class of vessels subject to speed regulation would remain unchanged.
- 4) Alternative 4 would restrict the speed of most vessels greater than or equal to 35 ft (10.7 m) and less than 65 ft (19.8 m) in length to 10 knots (5.1 m/s) or less within existing SMAs, and establish a mandatory DSZ program.
- 5) Alternative 5 (Preferred Alternative) would modify the spatial and temporal boundaries of the existing SMAs to create newly proposed SSZs, add vessels greater than or equal to 35 ft (10.7 m) and less than 65 ft (19.8 m) in length to the vessel size class subject to speed regulation, and establish a mandatory DSZ program.

The changes proposed in this action are designed to significantly reduce the risk of lethal vessel strike events involving right whales in support of broader efforts to stabilize the rapid, unsustainable decline in population. Maintaining the status quo (Alternative 1) would not result in any additional reduction in strike risk. Alternative 2 would address strike risk from most vessels greater than or equal to 35 ft (10.7 m) and less than 65 ft (19.8 m) in length but fails to fix the spatial and temporal misalignment of current SMAs, leaving right whales vulnerable to vessel collision in many areas. Alternative 4 partially addresses this issue by further extending mandatory protections through the DSZ framework, but given the broad spatial/temporal extent of the areas NMFS has identified as high risk outside the current SMAs, the use of a dynamic framework would be inadequate to mitigate the constant strike risk in certain areas/seasons, and would create a cumbersome and less predictable regulatory environment. Alternative 3 successfully addresses much of the spatial and temporal misalignment of current SMAs but fails to address the risk from vessels less than 65 ft

(19.8 m) in length, which account for at least 42% of documented lethal strike events in U.S. waters since the speed rule was implemented in 2008. Only Alternative 5, (the action proposed herein) provides a high likelihood (> 90%) of substantial reduction in lethal strike events involving most vessels greater than or equal to 35 ft (10.7 m) transiting at speeds greater than 10 knots (5.1 m/s), assuming full compliance with the proposed rule. .

The proposed action is not expected to have a disproportionately high effect on minority populations or low-income populations under E.O. 12898.

The proposed action does not contain policies with federalism implications under E.O. 13132.

This proposed action contains a revision to the existing collection-of-information authorization (OMB Control number 0648-0580) for this rule under the Paperwork Reduction Act (PRA). The appropriate PRA documents will be submitted following publication of the proposed rule.

List of Subjects in 50 CFR 224

Administrative practice and procedure, Boats and boating safety, Endangered and threatened species, Marine mammals, Transportation, Vessels, Whales.

Dated: July 25, 2022,

Samuel D. Rauch, III,

**Deputy Assistant Administrator for Regulatory Programs,
National Marine Fisheries Service.**

For the reasons set out in the preamble, the National Oceanic and Atmospheric Administration proposes to amend 50 CFR part 224 as follows:

PART 224—ENDANGERED MARINE AND ANADROMOUS SPECIES

1. The authority citation for part 224 continues to read as follows:

Authority: 16 U.S.C. 1531–1543 and 16 U.S.C. 1361 *et seq.*

2. Revise § 224.105 to read as follows:

§ 224.105 Speed restrictions to protect North Atlantic Right Whales.

(a) The following restrictions apply to: All vessels greater than or equal to 35 ft (10.7 m) in overall length and subject to the jurisdiction of the United States (U.S.), and all other vessels greater than or equal to 35 ft (10.7 m) in overall length entering or departing a port or place subject to the jurisdiction of the U.S. These restrictions shall not apply to U.S. vessels owned or operated by, or under contract to, the Federal Government. This exemption extends to foreign sovereign vessels when they are engaging in joint exercises with the U.S. Department of the Navy or the U.S. Coast Guard. In addition, these restrictions do not apply to law enforcement vessels of a State, or political subdivision thereof, when engaged in law enforcement or search and rescue duties. Vessels subject to the jurisdiction of the U.S. or entering or departing a port or place subject to the jurisdiction of the U.S. shall travel at a speed of 10 knots (5.1 m/s) or less over ground within Seasonal Speed Zones (SSZs) described in paragraphs (a)(1) through (5) of this section and Dynamic Speed Zones (DSZs) established under paragraph (a)(6) of this section:

(1) Atlantic Zone (north of Kill Devil Hills, NC, to north of Gloucester, MA): During the period of November 1 to May 30 each year, includes marine waters beginning at the charted mean high water line within the area bounded by straight lines connecting the following points in the table in the order stated from north to south;

| Table 1 to paragraph (a)(1) | |
|-----------------------------|--------------|
| Latitude | Longitude |
| 42°38'23" N | 070°34'21" W |

| | |
|-------------|--------------|
| 42°20'10" N | 069°59'30" W |
| 40°21'0" N | 068°38'54" W |
| 40°21'0" N | 071°51'21" W |
| 39°56'53" N | 072°52'28" W |
| 38°30'46" N | 074°12'12" W |
| 36°50'21" N | 075°6'15" W |
| 36°6'00" N | 075°15'00" W |
| 36°6'00" N | at shoreline |

thence bounded on the west by the shoreline and the Convention on the International Regulations for Preventing Collisions at Sea (COLREGS) Demarcation Lines, from 36°6'00" N north to 40°21'0" N; thence bounded by the following point 41°04'16" N, 71°51'21" W; thence to the shoreline at 71°51'21" W; thence bounded on the north by the shoreline and the COLREGS Demarcation Lines to 70°39'23" W, 41°30'54" N; thence bounded by the shoreline to 70°52'54" W, 42°18'37" N; thence bounded by the following point 70°54'3"W 42°25'14"N; thence bounded by the shoreline and the COLREGS Demarcation Lines back to the starting point.

(2) Great South Channel Zone (east of Cape Cod, MA): During the period of April 1 to June 30 each year, in all waters bounded by straight lines connecting the following points in Table 2 in the order stated.

| Table 2 to paragraph (a)(2) | |
|-----------------------------|-----------|
| Latitude | Longitude |

| | |
|-------------|--------------|
| 41°44'08" N | 069°34'50" W |
| 42°10'00" N | 068°31'00" W |
| 41°24'53" N | 068°31'00" W |
| 40°50'28" N | 068°58'40" W |

(3) North Carolina Zone (Wilmington, NC, to north of Kill Devil Hills, NC): During the period of November 1 to April 30 each year, includes marine waters beginning at the charted mean high water line within the area bounded on the west by the shoreline and the COLREGS Demarcation Lines, and on the east by straight lines connecting the following points in Table 3 in the order stated from north to south.

| Table 3 to paragraph (a)(3) | |
|-----------------------------|--------------|
| Latitude | Longitude |
| 36°06'00" N | at shoreline |
| 36°06'00" N | 075°15'00" W |
| 35°36'30" N | 075°03'00" W |
| 35°15'10" N | 075°06'30" W |
| 34°59'10" N | 075°14'40" W |
| 34°53'30" N | 075°32'40" W |
| 34°39'00" N | 075°59'10" W |
| 34°15'50" N | 076°27'30" W |

| | |
|-------------|--------------|
| 34°21'25" N | 076°49'15" W |
| 34°11'50" N | 077°13'50" W |
| 33°56'40" N | 077°31'30" W |
| 34°10'30" N | at shoreline |

(4) South Carolina Zone (north of Brunswick, GA, to Wilmington, NC):

During the period of November 1 to April 15 each year, includes marine waters beginning at the charted mean high water line within the area bounded on the west by the shoreline and the COLREGS Demarcation Lines, and on the east by straight lines connecting the following points in Table 4 in the order stated from north to south.

| Table 4 to paragraph (a)(4) | |
|-----------------------------|--------------|
| Latitude | Longitude |
| 34°10'30" N | at shoreline |
| 33°56'40" N | 077°31'30" W |
| 29°45'00" N | 080°51'36" W |
| 33°36'30" N | 077°47'06" W |
| 33°28'24" N | 078°32'30" W |
| 32°59'06" N | 078°50'18" W |
| 31°50'00" N | 080°33'12" W |
| 31°27'00" N | 080°51'36" W |

| | |
|-------------|--------------|
| 31°27'00" N | at shoreline |
|-------------|--------------|

(5) Southeast Zone (south of Cape Canaveral, FL, to north of Brunswick, GA): During the period of November 15 to April 15 each year, includes marine waters beginning at the charted mean high water line within the area bounded on the west by the shoreline and the COLREGS Demarcation Lines, and on the east by straight lines connecting the following points in Table 5 in the order stated from north to south.

| Table 5 to paragraph (a)(5) | |
|-----------------------------|--------------|
| Latitude | Longitude |
| 31°27'00" N | at shoreline |
| 31°27'00" N | 080°51'36" W |
| 29°45'00" N | 080°51'36" W |
| 29°45'00" N | 081°01'00" W |
| 29°15'00" N | 080°55'00" W |
| 29°08'00" N | 080°51'00" W |
| 28°50'00" N | 080°39'00" W |
| 28°38'00" N | 080°30'00" W |
| 28°28'00" N | 080°26'00" W |
| 28°24'00" N | 080°27'00" W |
| 28°21'00" N | 080°31'00" W |

| | |
|-------------|--------------|
| 28°16'00" N | 080°31'00" W |
| 28°11'00" N | 080°33'00" W |
| 28°00'00" N | 080°29'00" W |
| 28°00'00" N | At shoreline |

(6) Dynamic Speed Zones (DSZs):

(i) *Designation.* At all times of year and in all waters along the U.S. Atlantic seaboard, including the entire U.S. Exclusive Economic Zone, except SSZs specified in paragraphs (a)(1) through (5) of this section, a DSZ will be designated upon a determination by NMFS that there exists:

(A) At a minimum, a confirmed visual sighting of three or more North Atlantic right whales within close proximity or confirmed acoustic detection of a North Atlantic right whale; and

(B) A greater than 50 percent likelihood that North Atlantic right whales will remain within the designated DSZ while it is in effect.

(C) A DSZ shall have a minimum effective period of 10 days and shall not exceed 2500 sq nm (8575 sq km) in size for visually triggered DSZs and 400 sq nm (1372 sq km) for acoustically triggered DSZs. The DSZ may be extended for additional periods provided that NMFS makes the required determinations for designating a DSZ specified in this paragraph.

(ii) *Notice of DSZ.* Notice of a DSZ or DSZ extension will be posted at <https://www.fisheries.noaa.gov> and disseminated via U.S. Coast Guard Notice to Mariners, NOAA Weather Radio announcements, and through other practicable appropriate means, as well as by Notice in the **Federal Register** as soon as practicable.

(b) A vessel may operate at a speed in excess of 10 knots (5.1 m/s) in an active designated SSZ or DSZ only if:

(1) Justified because an emergency situation presents a threat to the health, safety, or life of a person;

(2) Necessary to maintain safe maneuvering speed and justified because the vessel is in an area where oceanographic, hydrographic, and/or meteorological conditions severely restrict the maneuverability of the vessel and the need to operate at such speed is confirmed by the pilot on board or, when a vessel is not carrying a pilot, the master of the vessel; or

(3) A vessel less than 65 ft (19.8 m) in length is transiting within areas where a National Weather Service Gale Warning, or other National Weather Service Warning (e.g., Storm Warning, Hurricane Warning) for wind speeds exceeding those that trigger a Gale Warning is in effect.

(c) If a deviation from the requirements in paragraph (a) of this section is necessary under paragraph (b)(1) or (2) of this section, the vessel operator must complete and electronically submit an accurate and complete Safety Deviation Report to NMFS at <https://www.fisheries.noaa.gov> within 48 hours of the deviation. The Safety Deviation Report shall describe, in detail, the circumstances surrounding the deviation and need for the deviation on forms provided by NMFS. The vessel operator and, if the vessel is under pilotage at the time of the deviation, the pilot on board shall attest to the accuracy of the information in the Safety Deviation Report before it is submitted.

(d) Except as provided under paragraph (b) of this section, it is unlawful for any person subject to the jurisdiction of the U.S. to commit, to attempt to commit, to solicit another to commit, or to cause to be committed any speed violation with a vessel subject to the restrictions established in paragraph (a) of this section or a reporting violation described in paragraph (c) of this section.

(e) Any person or vessel claiming the applicability of any exception under paragraph (b) of this section has the burden of proving that the exception applies.

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